PATENT $\frac{\text{AF}}{3738}$

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	**G. David Jang**
Application No.:	**09/925562**
Filed:	**August 9, 2001**
For:	**Intravascular Stent**
Examiner:	**Paul Prebilic**
Group Art Unit:	**3738**

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Docket No.: S63.2N-8429-US03

TRANSMITTAL LETTER

1. In regard to the above-identified application, in addition to this 1 page transmittal letter, we are submitting the attached:
28 page Brief on Appeal in triplicate; $500.00 check and Postcard.

2. With respect to fees:
   - ☐ No additional fee is required.
   - ■ Attached is check(s) in the amount of $500.00
   - ☐ Charge additional fee to our Deposit Account No. 22-0350.

3. **CONDITIONAL PETITION FOR EXTENSION OF TIME**
This conditional petition is being filed along with the papers identified in Item 1 above and provides for the possibility that Applicant has inadvertently overlooked the need for a petition and fee for extension of time or for a petition and fee for any other matter petitionable to the Commissioner as required. If any extension of time for the accompanying response is required or if a petition for any other matter is required, by petitioner, Applicant requests that this be considered a petition therefor.

4. Notwithstanding paragraph 2 above, if any additional fees associated with this communication are required and have not otherwise been paid, including any fee associated with the Conditional Petition for Extension of Time, or any request in the accompanying papers for action which requires a fee as a petition to the Commissioner, please charge the additional fees to Deposit Account No. 22-0350. Please charge any additional fees or credit overpayment associated with this communication to the Deposit Account No. 22-0350.

Respectfully submitted,

VIDAS, ARRETT & STEINKRAUS

Date: September 30, 2005

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Rebecca M. Painschab

Rebecca M. Painschab

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of:	G. David Jang
Application No.:	09/925,562
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BRIEF ON APPEAL

This is a Brief on Appeal for the above-identified application in which claims 34-36, 39-43, 47 and 49-62 were finally rejected and claims 60 and 61 withdrawn in a Final Office Action mailed March 7, 2005. Claims 34-36, 39-43, 47, 49-59 and 62 are pending in the application.

A Notice of Appeal was filed in this case on August 3, 2005. The fees required under §1.17(c) for filing this brief were addressed in the Notice of Appeal. The Commissioner is authorized to charge Deposit Account No. 22-0350 for any other fees which may be due with this Appeal.

A copy of the claims on appeal is presented below as **APPENDIX A**.

(i) Real Party in Interest

The application is assigned to SciMed Life Systems, Inc., One SciMed Place, Maple Grove, MN 55311-1566, a Minnesota Corporation and a subsidiary of Boston Scientific

Corporation, One Boston Scientific Place, Natick, Massachusetts, 01760-1537, a Delaware Corporation.

(ii) Related Appeals and Interferences

At present there are no related appeals or interferences, however Applicant submits herewith notice to the USPTO that the present Application, and/or related Applications and patents, is currently the subject of, or relevant to litigation. More specifically, a litigation is underway in the United States District Court for the Central District of California (Eastern Division-Riverside) involving G. David Jang verses Boston Scientific Corporation and Scimed Life Systems, Inc. (Civil Action Number: 05-00426). A litigation is also underway in the United States District Court for the District of Delaware between Boston Scientific Scimed Inc., and Boston Scientific Corporation verses Cordis Corporation and Johnson and Johnson Inc. (Civil Action Number: 03-283-SLR).

(iii) Status of Claims

Claims 1-33, 37-38, 44-46, and 48 have been canceled. Claims 60 and 61 have been withdrawn by the Examiner. Claims 34-36, 39-43, 47, 49-59 and 62 are pending, have been rejected and are the subject of this appeal. No claims have been allowed. Claims 51-59 and 62 have been rejected under 35 U.S.C. §112, second paragraph. Claims 34-36, 39-43, 47, 49, 50, and 62 have been rejected under 35 U.S.C. §103(a) as being obvious over U.S. 6,348,065 to Brown et al in view of U.S. 5,449,373 to Pinchasik et al. Claims 51-59 have been rejected

under 35 U.S.C. §103(a) as being obvious over U.S. 5,733,303 to Israel et al or U.S. 5,807,404 to Richter.

(iv) Status of Amendments

Subsequent to the Final Office Action of March 7, 2005, Applicant filed an Amendment After Final on May 5, 2005, wherein independent claims 51, 60 and 62 were amended to recite that the claimed stent is "constructed from a tube" in order to overcome the 35 U.S.C. §112, second paragraph rejection. No other amendments were made to the claims.

In an Advisory Action of June, 16, 2005 it was recognized that the 35 U.S.C. §112, second paragraph rejection had been overcome and that the Amendment After Final of May 5, 2005 would be entered for the purpose of Appeal.

(v) Summary of Claimed Subject Matter

A summary of representative claims and a non-limiting listing of locations where support may be found [bracketed citations] is provided as follows, Applicant however also directs the Board generally to page 22, lines 13-15 and FIG. 10F:

The invention of **claim 34** is directed to a stent constructed from a metal tube [page 25, lines 17-18], wherein the stent comprises a plurality of interconnected first expansion struts, a plurality of interconnected second expansion struts, and a plurality of interconnected third expansion struts arranged in respectively designated serpentine expansion columns [page 9, lines 5-9]. Each serpentine expansion column has a proximal end region and a distal end region,

and each defines a continuous closed path about the circumference of the stent [page 9, lines 24-25].

The stent further comprises a first connecting strut column and a second connecting strut column [page 9, lines 28-30]. The first connecting strut column comprises a plurality of first connecting struts, each of which has a first end that extends from a connection location at the distal end region of the first serpentine expansion column which is closer to one first expansion strut than to any other first expansion strut [page 24, lines 10-12; FIG.10F]. A second end of each first connecting strut extends from a connection location at the proximal end region of the second serpentine expansion column which is closer to one second expansion strut than any other second expansion strut [page 24, lines 21-23; FIG.10F]. At least one curved region is between the first end and the second end of the first connecting strut [page 11, lines 25-27; page 19, lines 26-3; FIG. 10F]. The first and second ends of the first connecting struts are non-parallel to the longitudinal axis of the stent [FIG. 10F]. The connection locations of the first and second ends of the first connecting strut are longitudinally and circumferentially offset from one another [page 10, lines 19-24; page 19, lines 26-31; FIG. 10F]. The first and second serpentine expansion columns are connected only by first connecting struts [FIGs.1A, 2A-10F]. The second connecting strut column comprises a plurality of second connecting struts, each of which has a first end extending from a connection location at the distal end region of the second serpentine expansion column which is closer to one second expansion strut than to any other second expansion strut [page 22, lines 13-15; page 24, lines 10-12]. A second end of each second connecting strut extends from the proximal end region of the third serpentine expansion column which is closer to one third expansion strut than any other third expansion strut [page 22,

lines 13-15; page 24, lines 10-12]. At least one curved region is between the first end and the second end of the second connecting strut [page 11, lines 25-27; page 19, lines 26-31; page 22, lines 13-15]. The first and second ends of the second connecting struts being non-parallel to the longitudinal axis of the stent [page 22, lines 13-15; FIG. 10F]. The connection locations of the first and second ends of the second connecting strut is longitudinally and circumferentially offset from one another [page 10, lines 19-24; page 19, lines 26-31; page 22, lines 13-15; FIG. 10F]. The second and third serpentine expansion columns connected only by second connecting struts[page 22, lines 13-15; FIGs.1A, 2A-10F].

The invention of **claim 39** is directed to a stent constructed from a metal tube [page 25, lines 17-18], wherein the stent comprises a plurality of interconnected expansion struts which form serpentine expansion columns, each of which have a proximal end region and a distal end region [page see FIGs.1A, 2A-10F]. First, second and third serpentine expansion columns each define a continuous closed path about the circumference of the stent [page 9, lines 24-25].

A first connecting strut column comprises a plurality of first connecting struts which are flexible, wherein each first connecting strut has a first end extending from the distal end region of the first expansion column and a second end extending from the proximal end region of the second expansion column and at least one curved portion [page 10, lines 7-9; page 11, lines 25-27; page 22, lines 13-15; FIG. 10F]. A second connecting strut column comprises a plurality of second connecting struts which are flexible, wherein each second connecting strut has a first end extending from the distal end region of the second expansion column and a second

end extending from the proximal end region of the third expansion column and at least one curved portion [page 10, lines 7-9; page 11, lines 25-27; page 22, lines 13-15; FIG. 10F].

The first serpentine expansion column, the second serpentine expansion column and the first connecting strut column form a plurality of first geometric cells about the circumference of the stent, wherein each first geometric cell has a proximal region extending between two adjacent interconnected first expansion struts, a distal region extending between two adjacent interconnected second expansion struts and a middle region extending between two adjacent first connecting struts and portions of the first and second expansion columns, wherein the proximal region and the distal region are circumferentially offset from one another, and the stent has only first geometric cells [page 10, lines 19-26; see also FIG. 1A].

The invention of **claim 42** is directed to a stent constructed from a metal tube [page 25, lines 17-18], wherein the stent consists of a plurality of expansion columns each of which forms a closed pathway about the circumference of the stent, wherein adjacent expansion columns are connected to one another via connecting members [page 9, lines 24-30]. The stent expansion columns and connecting members form a plurality of cells, each of which has substantially the same asymmetrical shape [page 10, lines 12-26; page 22, lines 13-15]. Each of the cells have end portions that are longitudinally and circumferentially offset and are connected via a plurality of connecting members, each of which has a plurality of curved sections [see FIG. 10F].

The invention of **claim 47** is directed to an unexpanded stent constructed from a metal tube [page 8, lines 30-32; page 19, lines 8-11; page 25, lines 17-18]. The stent comprises a plurality of interconnected first expansion struts that form a first expansion column, which has a

proximal end region and a distal end region, wherein each first expansion strut is connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto [page 9, lines 20-22]. The stent also comprises a plurality of interconnected second expansion struts that form a second expansion column, which has a proximal end region and a distal end region, wherein each second expansion strut is connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto [page 9, lines 20-22, see also FIG. 1A]. The first and second expansion columns each define a continuous closed path about the circumference of the stent [page 9, lines 24-27].

The stent further comprises a first connecting strut column, which comprises a plurality of first connecting struts, each of which has a first end extending from the distal end region of the first expansion column at a first location in closer proximity to one first expansion strut than to any other of the plurality of first expansion struts, a second end extending from the proximal end region of the second expansion column at a second location in closer proximity to one second expansion strut than to any other of the plurality of second expansion struts [page 24, lines 10-23]. The first and second locations are longitudinally and circumferentially offset from one another [see FIG. 10F]. At least one curved region is between the first end and the second end of the connecting strut [see FIG. 10F]. The first end of the first connecting strut longitudinally and circumferentially offset from the second end of the first connecting strut [see FIG. 10F].

The invention of **claim 49** is directed to an unexpanded stent constructed from a metal tube [page 8, lines 30-32; page 19, lines 8-11; page 25, lines 17-18]. The stent comprises a

plurality of interconnected first expansion struts, which form a closed, continuous first expansion column having a proximal end region and a distal end region, wherein each first expansion strut is connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto [page 9, lines 20-27]. The stent also comprises a plurality of interconnected second expansion struts, which form a closed, continuous second expansion column having a proximal end region and a distal end region, wherein each second expansion strut is connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto [page 9, lines 20-27].

The stent further comprises a first connecting strut column, which is comprised of a plurality of first connecting struts, each of which has a first end extending from the distal end region of the first expansion column at a location in closer proximity to one first expansion strut than to any other of the plurality of first expansion struts [page 9, lines 30-31; see also FIGs. 1A and 2A-10F]. Each first connecting strut includes a first end and a second end, wherein the first end is connected to the first expansion column at a first connection location and the second end is connected to the second expansion column at a second location which is longitudinally and circumferentially offset from the first connection location [page 24, lines 10-23; FIG. 10F].

Each first connecting strut includes a portion which extends in a longitudinal direction toward the second expansion column and in a circumferential direction away from the two first expansion struts which are distally interconnected and nearest to the first end of the first connecting strut [see FIG. 10F]. Each connecting strut includes a portion which extends in a longitudinal direction toward the second expansion column and in a circumferential direction

toward the two first expansion struts nearest to the first end of the connecting strut [see FIG. 10F].

The invention of **claim 50** is directed to an unexpanded stent constructed from a metal tube [page 8, lines 30-32; page 19, lines 8-11; page 25, lines 17-18]. The stent comprises a plurality of interconnected first expansion struts that form a closed, continuous first expansion column, which has a proximal end region and a distal end region, wherein each first expansion strut is connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto [page 9, lines 18-27; page 22, lines 13-15]. The stent also comprises a plurality of interconnected second expansion struts that form a closed, continuous second expansion column, which has a proximal end region and a distal end region, wherein each second expansion strut is connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto [page 9, lines 18-27; page 22, lines 13-15]. The stent also comprises a plurality of interconnected third expansion struts that form a closed, continuous third expansion column, which has a proximal end region and a distal end region, wherein each third expansion strut is connected at a proximal end to one third expansion strut adjacent thereto and at a distal end to another third expansion strut adjacent thereto [page 9, lines 18-27; page 22, lines 13-15].

In addition, the stent comprises a first connecting strut column which consists of a plurality of first connecting struts, wherein each first connecting strut has a first end extending from the distal end region of the first expansion column at a location in closer proximity to one first expansion strut than to any other of the plurality of first expansion struts and a second end which is connected to the second expansion strut column at a second location, wherein the first

and second locations are longitudinally and circumferentially offset from one another [see FIG. 10F]. A second connecting strut column consisting of a plurality of second connecting struts, wherein each second connecting strut has a first end extending from the distal end region of the second expansion column at a location in closer proximity to one second expansion strut than to any other of the plurality of second expansion struts and a second end which is connected to the third expansion strut column at a location which is longitudinally and circumferentially offset from the location of the first end of the connecting strut [page 9, lines 30-31; see also FIGs. 1A and 2A-10F]. The first and second expansion strut columns are connected to one another only via the first connecting strut column and the second and third expansion strut columns are connected to one another only via the second connecting strut column [see FIGs. 1A and 2A-10F].

The invention of **claim 51** is directed to an unexpanded stent constructed from a tube [page 25, lines 17-18]. The stent comprises a first expansion column which has a plurality of first expansion strut pairs [page 24, lines 3-4; FIG. 10F]. Each first expansion strut pair includes two interconnected first expansion struts, wherein each first expansion strut pair is open at a proximal end of the first expansion column and closed at a distal end of the first expansion column [page 9, lines 9-10 and line 19; FIG. 10F]. First expansion strut pairs which are adjacent one another are connected to one another at a proximal end of the first expansion column [page 9, lines 20-22]. The first expansion column defines a continuous closed path about the circumference of the stent [see FIG. 6b for example].

A second expansion column has a plurality of second expansion strut pairs, wherein each second expansion strut pair includes two interconnected second expansion struts

[page 9, lines 5-6 and lines 9-10]. Each second expansion strut pair is open at a distal end of the second expansion column and closed at a proximal end of the second expansion column [page 9, lines 5-6 and line 19]. The second expansion strut pairs which are adjacent one another are connected to one another at a distal end of the second expansion column [see FIG. 10F]. The second expansion column is distal to the first expansion column, and defines a continuous closed path about the circumference of the stent [see FIG. 10F].

A first connector column has a plurality of first connectors, wherein each first connector extends from a distal end region of one first expansion strut pair to a proximal end region of one second expansion strut pair and directly connects the one first expansion strut pair to the one second expansion strut pair [see FIG. 10F]. The one second expansion strut pair has a second expansion strut which is collinear with one of the first expansion struts of the one first expansion strut pair to which it is connected [see FIG. 10F]. A first end of the first connector connects to the first expansion strut pair at a location which is longitudinally and circumferentially offset from a location at which the second end of the first connector connects to the second expansion strut pair [see FIG. 10F].

The invention of **claim 62** is directed to an unexpanded stent constructed from a tube [page 25, lines 17-18]. The stent comprises a first, second and third expansion columns each of which has a plurality of expansion struts which extend parallel to the longitudinal axis of the stent [page 9, lines 5-6 and lines 10-11] . Adjacent expansion struts are connected by a joining strut [page 9, lines 18-19. The expansion columns each define a continuous closed path about the circumference of the stent [see FIG. 6B for example].

A first connector column has a plurality of first connectors connecting the first expansion column to the second expansion column, wherein each first connector includes curved regions joined by linear sections [see FIG. 10F]. Each first connector has a first end which extends from the first expansion column at a location which is circumferentially and longitudinally offset from a location from which a second end of the first connector extends from the second expansion column [see FIG. 10F].

A second connector column has a plurality of second connectors connecting the second expansion column to the third expansion column, wherein each second connector including curved regions joined by linear sections [page 22, lines 13-15; page 9, lines 5-6; see FIG. 10F]. Each second connector has a first end which extends from the second expansion column at a location which is circumferentially and longitudinally offset from a location from which a second end of the second connector extend from the third expansion column [page 22, lines 13-15; page 9, lines 5-6; see FIG. 10F].

Every other second expansion strut in the second expansion column has a first connector extending directly therefrom and a second connector extending directly therefrom, the remaining struts not having any first or second connectors extending directly therefrom [page 22, lines 13-15; page 9, lines 5-6; see FIG. 10F].

(vi) Grounds of Rejection to be Reviewed on Appeal

1. Whether the Examiner erred in rejecting claims 34-36, 39-43, 47, 49, 50 and 62 under 35 U.S.C. §103(a) as being obvious over US 6348065 to Brown et al in view of U.S. 5,449,373 to Pinchasik et al.

2. Whether the Examiner erred in rejecting claims 51-59 under 35 U.S.C. §103(a) as being obvious over U.S. 5,733,303 to Israel et al or U.S. 5,807,404 to Richter.

(vii) Argument

1. The Examiner erred in rejecting claims 34-36, 39-43, 47, 49, 50 and 62 under 35 U.S.C. §103(a) as being obvious over Brown in view of Pinchasik.

In the Final Office Action of March 7, 2005, claims 34-36, 39-43, 47, 49, 50 and 62 were rejected under 35 U.S.C. §103(a) as being obvious over US 6348065 to Brown et al (Hereinafter: "Brown") in view of U.S. 5,449,373 to Pinchasik et al (Hereinafter: "Pinchasik").

The Examiner states that Brown fails to disclose curved connectors but that "it would have been obvious to make the connectors of Brown curved for the same reasons that Pinchasik does the same and in order to better support the area between the segments."

In forming the §103 rejection the Examiner specifically points to the embodiment shown in FIGs. 2a to 2c of Pinchasik. Pinchasik states that the stent shown in FIGs 2a-2c is comprised of substantially rigid segments 102 connected by connectors 110 (column 3, lines 22-26). Pinchasik goes on to describe that the curved links 112 of the connectors 110 are deployed around the perimeters of the rigid segments 102 such that the connectors 110 can be equally flexed and to provide continuous and uniform support to a bodily conduit (column 3, lines 39-43).

In the Brown reference, and in direct contrast with the teaching of Pinchasik, Brown describes that the connectors between the segments are ***not*** intended to flex or bend under normal use (column 2, lines 29-39). In addition, Brown describes that the extension of the

interconnecting elements (connectors) between adjacent segments minimizes the possibility of binding and overlapping between segments (column 3, lines 35-42).

One of ordinary skill in the art would not seek to modify the stent of Brown to utilize curved connectors for the same reason that Pinchasik does.

An initial "reason" that Pinchasik provides for utilizing its curved connectors is so that the connectors can be "equally flexed" in any direction. This is in direct contrast to the stated purpose and function of the connectors in Brown, i.e. that the connectors ***not*** flex or bend.

It is recognized that when an attempt is made to combine two references, or to change a single reference, in an effort to establish §103 obviousness, a *prima facie* case of obviousness has not been established if the intended purpose or function of either reference, or both, is destroyed by their combination. (see: *McGinley v, Franklin Sports Inc.* 60 USPQ2d 1001, 1010 (CA FC 2001) citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

It seems intuitively obvious that if Brown were modified to utilize the "flexible" connectors of Pinchasik, as the Examiner has proposed, such connectors would likely bend or flex in direct conflict with the stated purpose and function of Brown that the connectors ***not*** flex or bend. Thus, one or ordinary skill in the art would have no motivation to attempt such a substitution, whether in light of, or despite, Pinchasik's stated reason for doing the same.

As indicated above, another "reason" that Pinchasik provides for utilizing the particular connector configuration shown in FIGS 2a-2c is to provide for continuous and uniform support to both straight and curved portions of a bodily conduit. Continuous and uniform support to a bodily conduit is feature however, that the stent of Pinchasik cannot be said to provide. Looking to FIGs. 2a-2c, of Pinchasik it is visually apparent that the segments 102 and

110 have very different configurations and relative amounts of metal coverage, particularly in the expanded state shown in FIG. 2c. Such differences inherently provide the segments 102 with non-uniform conduit support when compared to the adjacent connectors 110. It must also be noted that in Pinchasik the connectors 110 are fairly long compared to those of Brown. The shorter more rigid connectors of Brown would likely be considered by one of ordinary skill in the art to provide the stent of Brown with a more uniform and continuous conduit support than the stent of Pinchasik. One of ordinary skill in the art would not look to a Pinchasik to provide for uniform and continuous conduit support when the stent of Brown already provides for a better degree of such support.

Finally, the Examiner provides a third "reason" that it would have been obvious to combine the curved connectors of Pinchasik with the segments of Brown, namely that such connectors are said to "better support the area between the segments". The Examiner makes no attempt to describe what "better support" between the segments actually refers to or where either of the references teach or suggest such a feature. Applicant therefore assumes that the Examiner is asserting that the curved connectors of Pinchasik somehow provide greater structural support to the stent in the area between the segments than the straight connectors of Brown will provide.

Based on the above assumption Applicant respectfully disagrees that the curved connectors of Pinchasik provide "better" support in the area between the segments than the connectors of Brown will provide. As Pinchasik makes clear, the connectors 110 are flexible. This is in contrast to Brown where the connectors do not flex or bend. One of ordinary skill in the art would recognize that the more rigid connectors of Brown will provide "better" support in the area between segments than the flexible connectors of Pinchasik, and thus would not seek to

shoehorn the more flexible connectors of Pinchasik into the stent of Brown as the Examiner has attempted.

For at least the reasons stated above Applicant disagrees with the Examiner's contention that it would have been obvious to make the interconnectors of Brown curved for the same reasons that Pinchasik does the same and in order to better support the area between the segments. Applicant requests withdrawal of the rejection.

2. The Examiner erred in rejecting claims 51-59 under 35 U.S.C. §103(a) as being obvious over U.S. 5,733,303 to Israel et al or U.S. 5,807,404 to Richter.

In the Final Office Action of March 7, 2005, claims 51-59 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. 5,733,303 to Israel et al (Hereinafter: "Israel") or U.S. 5,807,404 to Richter (Hereinafter: "Richter").

Initially, Applicant emphasizes that the Examiner has not rejected the instant claims based on a proposed modification of Israel in view of Richter, rather the Examiner has asserted that while both references fail to meet all of the elements of the instant claims it would be a matter of design choice to circumferentially offset the ends of the connectors of ***either*** reference.

As Applicant has repeatedly argued, the Examiner has failed to demonstrate any teaching, suggestion or motivation, in either reference, to make the proposed modification(s). Instead the Examiner continues to assert that "it would have been an obvious matter of design choice to a person of ordinary skill in the art to circumferentially offset the ends of the connectors because Applicants have not disclosed that doing so provides some advantage, is used

for a particular purpose, or solves a stated problem." Applicant respectfully asserts however, that the Examiner's view of what advantage or purpose the "Applicant[s]" did or did not disclose is irrelevant to the finding of obviousness. §2143.01 of the MPEP states that §103 obviousness "can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly ***in the references themselves*** or in the knowledge generally available to one of ordinary skill in the art. (emphasis added).

Presumably because the cited references do not provide the necessary "teaching, suggestion, or motivation" the Examiner states that one of ordinary skill in the art "would have expected Applicants' invention to perform equally well because a slight position change of the ends is all that is required to meet the claim language and because it would not appreciably change the function of the stent to have a slight offset." An expectation of a given performance characteristic is not a teaching, suggestion or motivation to make the modification in the first place. While the performance expectations of one of ordinary skill in the art may be relevant to design choices, it is still necessary to provide a teaching, suggestion, or motivation to make the proposed modification in order to establish §103 obviousness. The Examiner may expect all sorts of things, but absent some teaching or suggestion in the cited art or in the knowledge generally available to make the stated modification, a finding of obviousness based solely on the Examiner's view of performance expectations is improper.

While a suggestion or motivation to combine references, or in this case modify either of two references, may come from the general knowledge of those of ordinary skill in the art, there must be actual evidence of such a suggestion or motivation and the showing must be

clear and particular. (See *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) abrogated on other grounds, in *In re Gartside*, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000); see also, *Smith Indus. Med. Sys. v. Vital Signs, Inc.*, 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1421(Fed. Cir. 1999).

The Examiner has failed to provide actual evidence of any teaching, suggestion, or motivation, to modify either of the cited references that one of ordinary skill in the art would recognize. As such Applicant requests that the rejection be withdrawn.

CONCLUSION

Instant claims 34-36, 39-43, 47, 49, 50 and 62 are patentably distinct over the asserted combination of Brown and Pinchasik. Likewise, claims 51-59 are patentably distinct over either Richter or Israel Consequently, reversal of the rejections under 35 U.S.C. §103 is respectfully requested.

Respectfully submitted,

VIDAS, ARRETT & STEINKRAUS, P.A.

Date: 9/30/05

By: _____

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(viii) Claims Appendix

Claim 34. A stent constructed from a metal tube, the stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first serpentine expansion column having a proximal end region and a distal end region, the first serpentine expansion column defining a continuous closed path about the circumference of the stent,

a plurality of interconnected second expansion struts, the second expansion struts forming a second serpentine expansion column having a proximal end region and a distal end region, the second serpentine expansion column defining a continuous closed path about the circumference of the stent,

a plurality of interconnected third expansion struts, the third expansion struts forming a third serpentine expansion column having a proximal end region and a distal end region, the third serpentine expansion column defining a continuous closed path about the circumference of the stent,

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from a connection location at the distal end region of the first serpentine expansion column which is closer to one first expansion strut than to any other first expansion strut, a second end extending from a connection location at the proximal end region of the second serpentine expansion column which is closer one second expansion strut than any other second expansion strut and at least one curved region between the first end and the second end of the first connecting strut, the first and second ends of the first connecting struts being non-parallel to the longitudinal axis of the stent, the connection locations of the first and second ends of the first connecting strut longitudinally and circumferentially offset from one another, the first and second serpentine expansion columns connected only by first connecting struts,

a second connecting strut column comprising a plurality of second connecting struts, each second connecting strut having a first end extending from a connection location at the distal end region of the second serpentine expansion column which is closer to one second expansion strut than to any other second expansion strut, a second end extending from a connection location at

the proximal end region of the third serpentine expansion column which is closer to one third expansion strut than any other third expansion strut and at least one curved region between the first end and the second end of the second connecting strut, the first and second ends of the second connecting struts being non-parallel to the longitudinal axis of the stent, the connection locations of the first and second ends of the second connecting strut longitudinally and circumferentially offset from one another, the second and third serpentine expansion columns connected only by second connecting struts.

Claim 35. The stent of claim 34 wherein the first expansion struts and the first connecting struts are provided in a ratio, the ratio of the first expansion struts to the first connecting struts is 2:1.

Claim 36. The stent of claim 34 wherein the first expansion column comprises a plurality of joining struts in the distal end region and a plurality of joining struts in the proximal end region, the second expansion column comprises a plurality of joining struts in the distal end region and a plurality of joining struts in the proximal end region, and each first connecting strut has a first end which extends from a side of one joining strut in the distal end region of the first expansion column closer to one first expansion strut than to any other first expansion strut and a second end which extends from a side of one joining strut in the proximal end region of the second expansion column closer to one second expansion strut than to any other second expansion strut.

Claim 39. A stent constructed from a metal tube, the stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first serpentine expansion column having a proximal end region and a distal end region,

a plurality of interconnected second expansion struts, the second expansion struts forming a second serpentine expansion column having a proximal end region and a distal end region,

a plurality of interconnected third expansion struts, the third expansion struts forming a third serpentine expansion column having a proximal end region and a distal end region,

the first, second and third serpentine expansion columns each defining a continuous closed path about the circumference of the stent;

a first connecting strut column comprising a plurality of first connecting struts which are flexible, each first connecting strut having a first end extending from the distal end region of the

first expansion column and a second end extending from the proximal end region of the second expansion column and at least one curved portion,

a second connecting strut column comprising a plurality of second connecting struts which are flexible, each second connecting strut having a first end extending from the distal end region of the second expansion column and a second end extending from the proximal end region of the third expansion column and at least one curved portion;

the first serpentine expansion column, the second serpentine expansion column and the first connecting strut column forming a plurality of first geometric cells about the circumference of the stent,

each first geometric cell having a proximal region extending between two adjacent interconnected first expansion struts, a distal region extending between two adjacent interconnected second expansion struts and a middle region extending between two adjacent first connecting struts and portions of the first and second expansion columns, the proximal region and the distal region circumferentially offset from one another, the stent having only first geometric cells.

Claim 40. The stent of claim 39 wherein each first connecting strut includes at least two curved portions.

Claim 41. The stent of claim 40 wherein the first expansion struts and the first connecting struts are provided in a ratio, the ratio of the first expansion struts to the first connecting struts is 2:1.

Claim 42. A stent constructed from a metal tube, the stent consisting of a plurality of expansion columns each of which forms a closed pathway about the circumference of the stent, adjacent expansion columns connected to one another via connecting members, the stent expansion columns and connecting members forming a plurality of cells, each of the plurality of cells having substantially the same asymmetrical shape, each of the plurality of cells having a first end portion and a second end portion, the second end portion longitudinally and circumferentially offset from the first end portion, the first end portion connected to the second end portion via a plurality of connecting members each of which has a plurality of curved sections.

Claim 43. The stent of claim 42 where each connecting member has a first end and a second end which is circumferentially and longitudinally offset from the first end.

Claim 47. An unexpanded stent constructed from a metal tube, the stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a first expansion column having a proximal end region and a distal end region, each first expansion strut connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto;

a plurality of interconnected second expansion struts, the second expansion struts forming a second expansion column having a proximal end region and a distal end region, each second expansion strut connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto;

the first and second expansion columns each defining a continuous closed path about the circumference of the stent;

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column at a first location in closer proximity to one first expansion strut than to any other of the plurality of first expansion struts, a second end extending from the proximal end region of the second expansion column at a second location in closer proximity to one second expansion strut than to any other of the plurality of second expansion struts, the first and second locations longitudinally and circumferentially offset from one another and at least one curved region between the first end and the second end of the connecting strut.

Claim 49. An unexpanded stent constructed from a metal tube, the stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a closed, continuous first expansion column having a proximal end region and a distal end region, each first expansion strut connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto;

a plurality of interconnected second expansion struts, the second expansion struts forming a closed, continuous second expansion column having a proximal end region and a distal end region, each second expansion strut connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto;

a first connecting strut column comprising a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first expansion column at a location in closer proximity to one first expansion strut than to any other of the plurality of first expansion struts,

each first connecting strut including a first end and a second end, the first end connected to the first expansion column at a first connection location and the second end connected to the second expansion column at a second connection location which is longitudinally and circumferentially offset from the first connection location,

each first connecting strut including a portion which extends in a longitudinal direction toward the second expansion column and in a circumferential direction away from the two first expansion struts which are distally interconnected and nearest to the first end of the first connecting strut, each connecting strut including a portion which extends in a longitudinal direction toward the second expansion column and in a circumferential direction toward the two first expansion struts nearest to the first end of the connecting strut.

Claim 50. An unexpanded stent constructed from a metal tube, the stent comprising:

a plurality of interconnected first expansion struts, the first expansion struts forming a closed, continuous first expansion column having a proximal end region and a distal end region, each first expansion strut connected at a proximal end to one first expansion strut adjacent thereto and at a distal end to another first expansion strut adjacent thereto;

a plurality of interconnected second expansion struts, the second expansion struts forming a closed, continuous second expansion column having a proximal end region and a distal end region, each second expansion strut connected at a proximal end to one second expansion strut adjacent thereto and at a distal end to another second expansion strut adjacent thereto;

a plurality of interconnected third expansion struts, the third expansion struts forming a closed, continuous third expansion column having a proximal end region and a distal end region, each third expansion strut connected at a proximal end to one third expansion strut adjacent thereto and at a distal end to another third expansion strut adjacent thereto;

a first connecting strut column consisting of a plurality of first connecting struts, each first connecting strut having a first end extending from the distal end region of the first

expansion column at a location in closer proximity to one first expansion strut than to any other of the plurality of first expansion struts,

and a second end which is connected to the second expansion strut column at a second location, the first and second locations longitudinally and circumferentially offset from one another;

a second connecting strut column consisting of a plurality of second connecting struts, each second connecting strut having a first end extending from the distal end region of the second expansion column at a location in closer proximity to one second expansion strut than to any other of the plurality of second expansion struts, and a second end which is connected to the third expansion strut column a location which is longitudinally and circumferentially offset from the location of the first end of the connecting strut,

wherein the first and second expansion strut columns are connected to one another only via the first connecting strut column and the second and third expansion strut columns are connected to one another only via the second connecting strut column.

Claim 51. An unexpanded stent constructed from a tube, the stent comprising:

a first expansion column having a plurality of first expansion strut pairs, each first expansion strut pair including two interconnected first expansion struts, each first expansion strut pair open at a proximal end of the first expansion column and closed at a distal end of the first expansion column, first expansion strut pairs which are adjacent one another connected to one another at a proximal end of the first expansion column, the first expansion column defining a continuous closed path about the circumference of the stent;

a second expansion column having a plurality of second expansion strut pairs, each second expansion strut pair including two interconnected second expansion struts, each second expansion strut pair open at a distal end of the second expansion column and closed at a proximal end of the second expansion column, second expansion strut pairs which are adjacent one another connected to one another at a distal end of the second expansion column, the second expansion column distal to the first expansion column, the second expansion column defining a continuous closed path about the circumference of the stent;

a first connector column having a plurality of first connectors, each first connector extending from a distal end region of one first expansion strut pair to a proximal end region of

one second expansion strut pair and directly connecting the one first expansion strut pair to the one second expansion strut pair, the one second expansion strut pair having a second expansion strut which is collinear with one of the first expansion struts of the one first expansion strut pair to which it is connected, a first end of the first connector connecting to the first expansion strut pair at a location which is longitudinally and circumferentially offset from a location at which the second end of the first connector connects to the second expansion strut pair.

Claim 52. The unexpanded stent of claim 51 wherein each first connector extends from a distal end of a first expansion strut to a proximal end of a second expansion strut.

Claim 53. The unexpanded stent of claim 51 wherein each connector includes a first linear section, a second linear section and a third linear section.

Claim 54. The unexpanded stent of claim 51 wherein a proximal end of each first connector extends from the first expansion column at an oblique angle relative to the longitudinal axis of the stent.

Claim 55. The unexpanded stent of claim 54 wherein a distal end of each first connector extends from the second expansion column at an oblique angle relative to the longitudinal axis of the stent.

Claim 56. The unexpanded stent of claim 51 wherein each first connector includes at least one curved portion.

Claim 57. The unexpanded stent of claim 51 further comprising:

a third expansion column having a plurality of third expansion strut pairs, each third expansion strut pair including two interconnected third expansion struts, each third expansion strut pair open at a distal end of the third expansion column and closed at a proximal end of the third expansion column, third expansion strut pairs which are adjacent one another connected to one another at a distal end of the third expansion column, the third expansion column defining a continuous closed path about the circumference of the stent;

a second connector column having a plurality of second connectors, wherein each second connector extends from a proximal end region of one third expansion strut pair to a distal end region of one second expansion strut pair and directly connects the one third expansion strut pair to the one second expansion strut pair, the one second expansion strut pair having a second expansion strut which is collinear with one of the third expansion strut of the one third expansion

strut pair to which it is connected, a second end of the second connector connecting to the third expansion strut pair at a location which is longitudinally and circumferentially offset from a location at which the first end of the second connector connects to the second expansion strut pair.

Claim 58. The stent of claim 57 wherein the first, second and third expansion struts are all parallel to the longitudinal axis of the stent and the second expansion column includes second expansion struts which do not have any first connectors extending directly therefrom and which do not have any second connectors extending directly therefrom.

Claim 59. The stent of claim 57 wherein the first, second and third expansion struts are all parallel to the longitudinal axis of the stent and the second expansion column includes second expansion struts which have a connector extending from a distal end thereof and a connector extending from a proximal end thereof.

Claim 62. An unexpanded stent constructed from a tube, the stent comprising:

a first expansion column having a plurality of first expansion struts which extend parallel to the longitudinal axis of the stent, adjacent first expansion struts connected by a first joining strut, the first expansion column defining a continuous closed path about the circumference of the stent,

a second expansion column having a plurality of second expansion struts which extend parallel to the longitudinal axis of the stent, adjacent second expansion struts connected by a second joining strut, the second expansion column defining a continuous closed path about the circumference of the stent,

a third expansion column having a plurality of third expansion struts which extend parallel to the longitudinal axis of the stent, adjacent third expansion struts connected by a third joining strut, the third expansion column defining a continuous closed path about the circumference of the stent,

a first connector column having a plurality of first connectors connecting the first expansion column to the second expansion column, each first connector including curved regions joined by linear sections, each first connector having a first end which extends from the first expansion column at a location which is circumferentially and longitudinally offset from a

location from which a second end of the first connector extends from the second expansion column,

a second connector column having a plurality of second connectors connecting the second expansion column to the third expansion column, each second connector including curved regions joined by linear sections, each second connector having a first end which extends from the second expansion column at a location which is circumferentially and longitudinally offset from a location from which a second end of the second connector extend from the third expansion column,

wherein every other second expansion strut in the second expansion column has a first connector extending directly therefrom and a second connector extending directly therefrom, the remaining struts not having any first or second connectors extending directly therefrom.

(ix) Evidence Appendix - N/A

(x) Related Proceedings Appendix

There have been no final decisions rendered in any of the proceedings of which the present Application may be relevant to as cited above (see (ii) above).